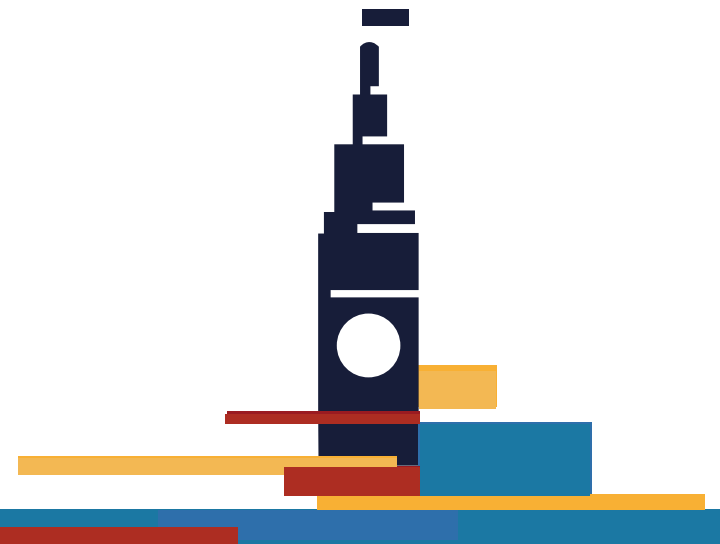


Heron's Head Park Improvements & Shoreline Resilience Projects

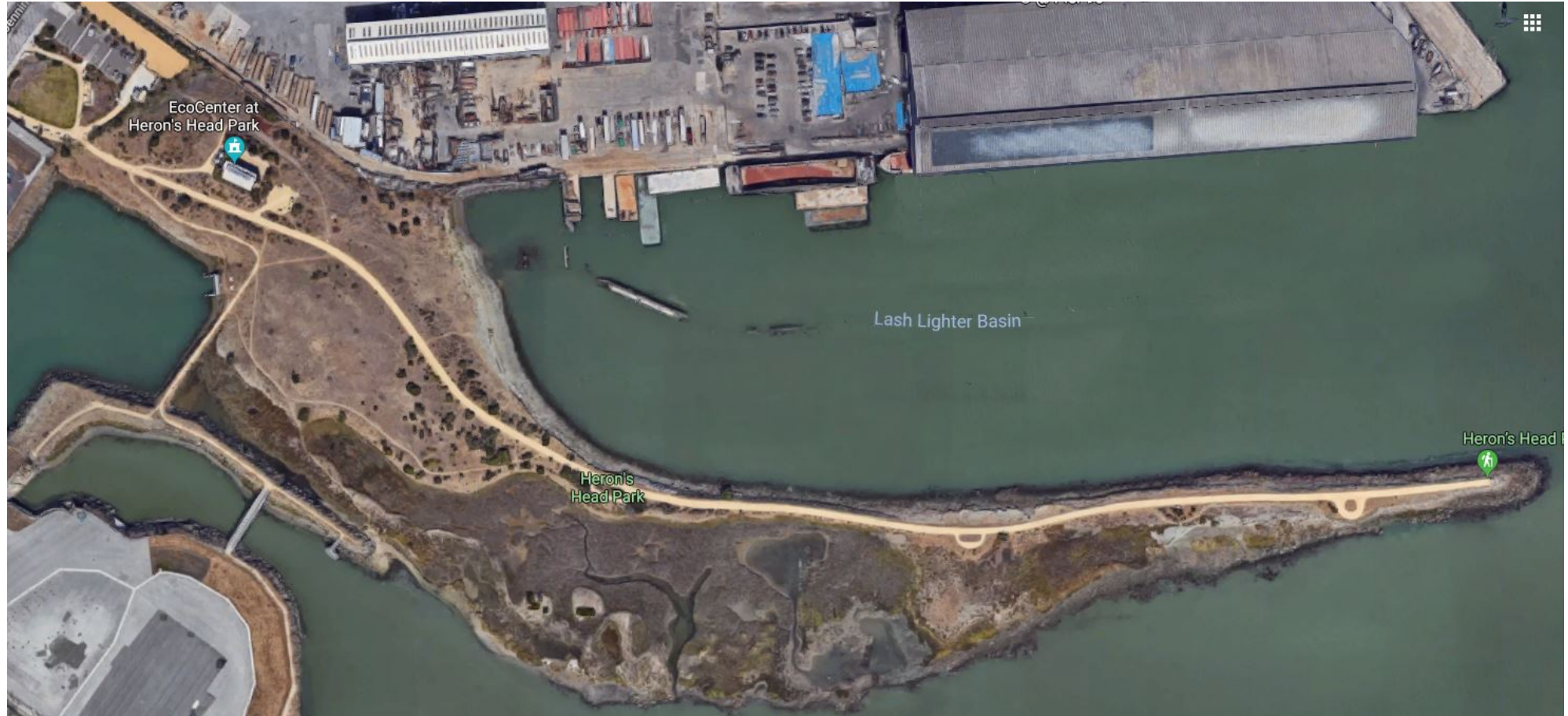
Port Southern Advisory Committee
August 19, 2020

Presented By: Carol Bach
Environmental Affairs Manager

Including Project on behalf of Erica Petersen
Engineering Project Manager



Background



Project Objectives

- Maintain and improve paths
- Improve capacity and access to EcoCenter
- Connect to PG&E Shoreline to South



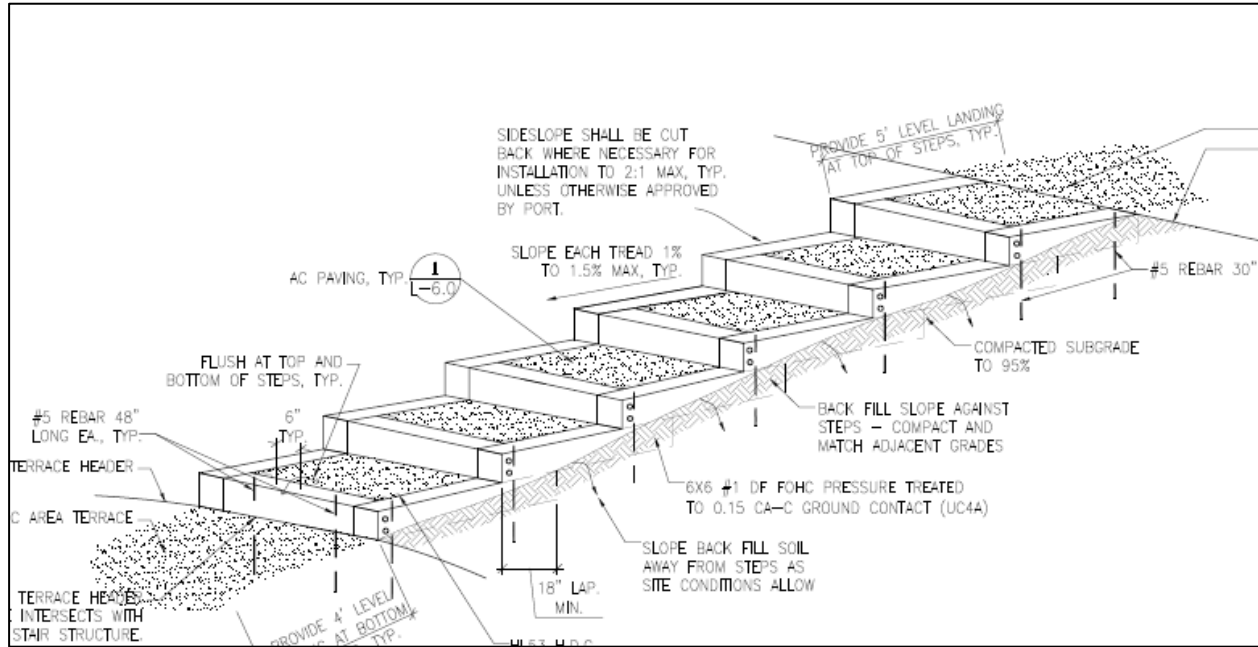
Project Description

- Asphalt Paving
 - ADA Secondary Path to PG&E Shoreline ---
 - Portion of Main Path ---
- Habitat Protection Fence ---
- Solar Panel System
- Path Lighting ---
- Irrigation & Hydroseeding



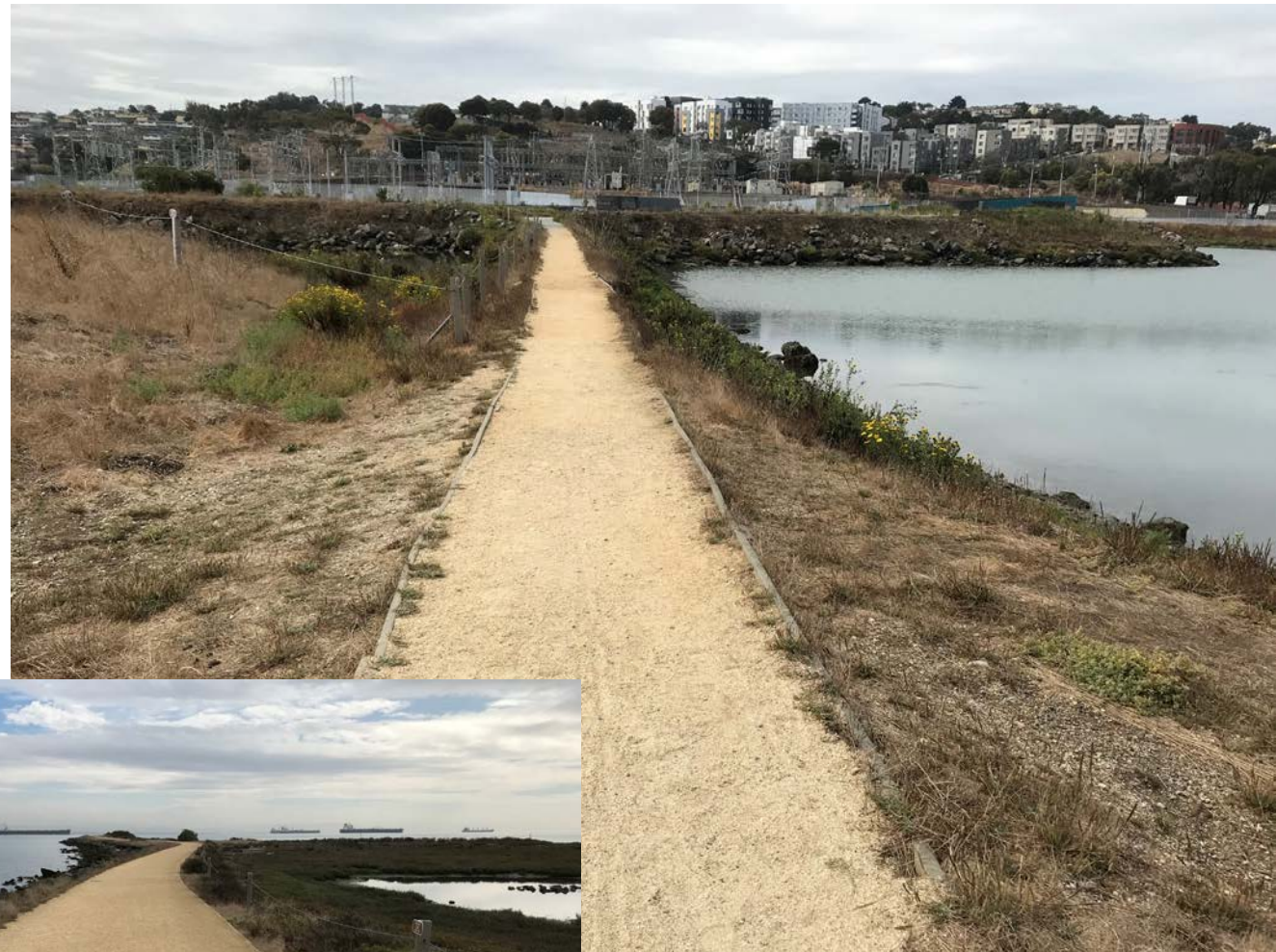
Project Description

- Bid Alternate
 - Ramp and Stairs
 - Paving
 - Irrigation & Hydroseeding



Budget and Funding

- Funding from 2012 Clean and Safe Parks General Obligation Bonds
- Engineer's Estimate
 - including 10% contingency
 - Base Bid: \$965,000
 - Bid Alternate: \$350,000
 - Total: \$1,315,000

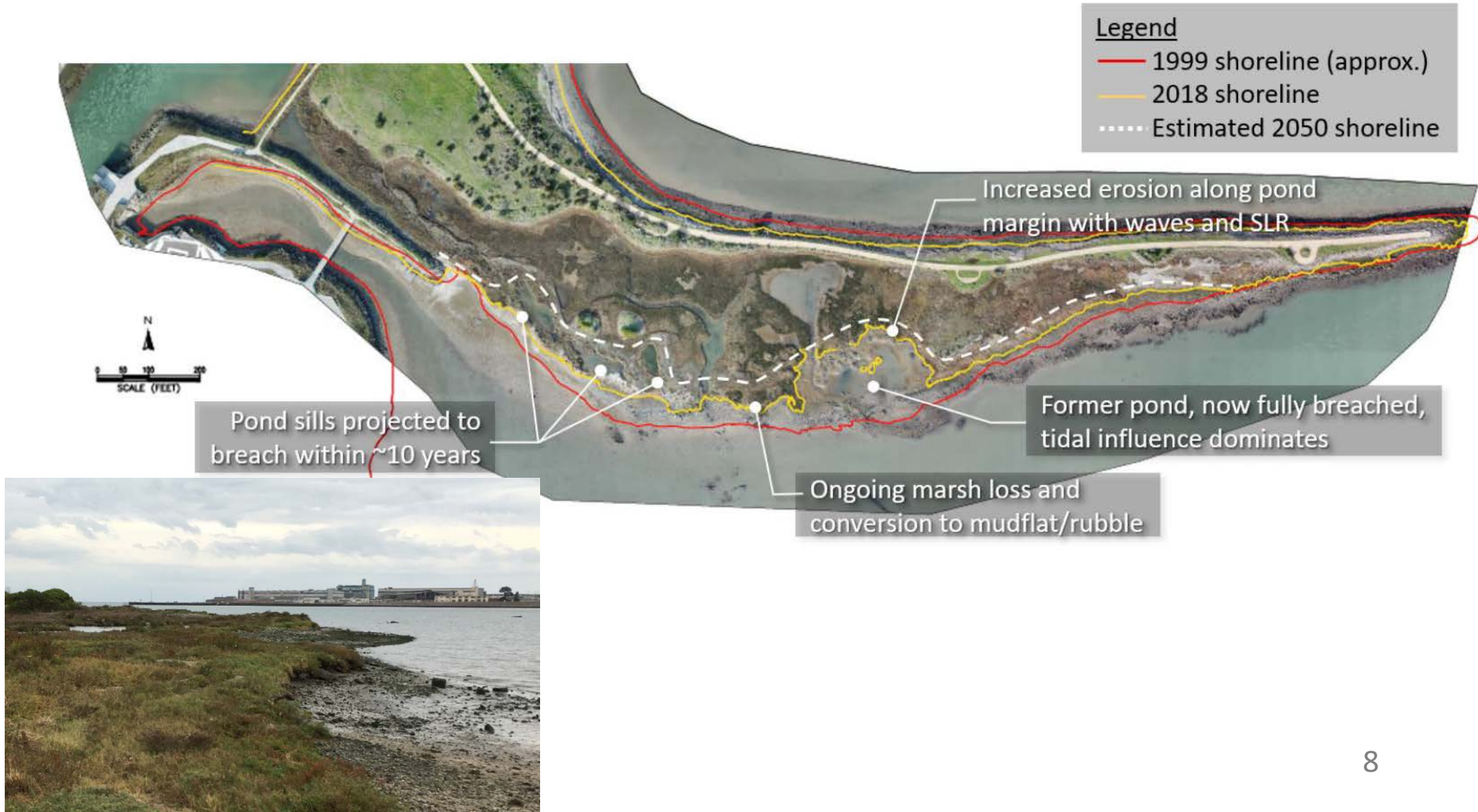




Heron's Head Park Living Shoreline Project

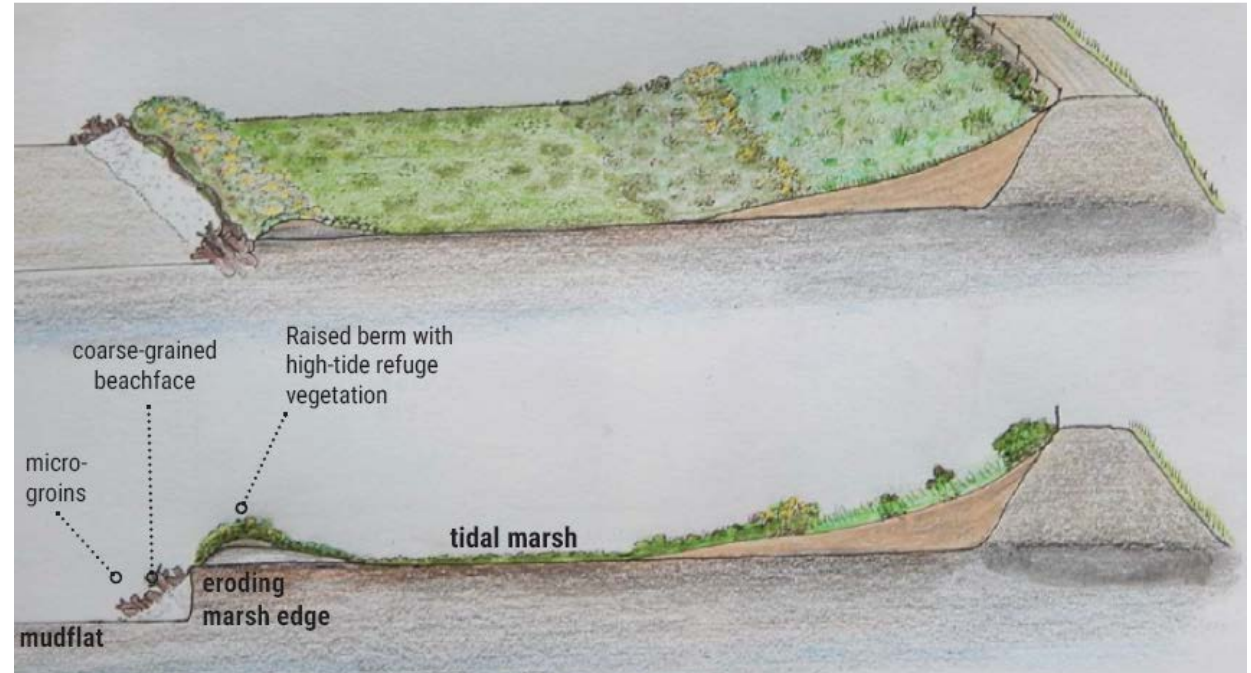
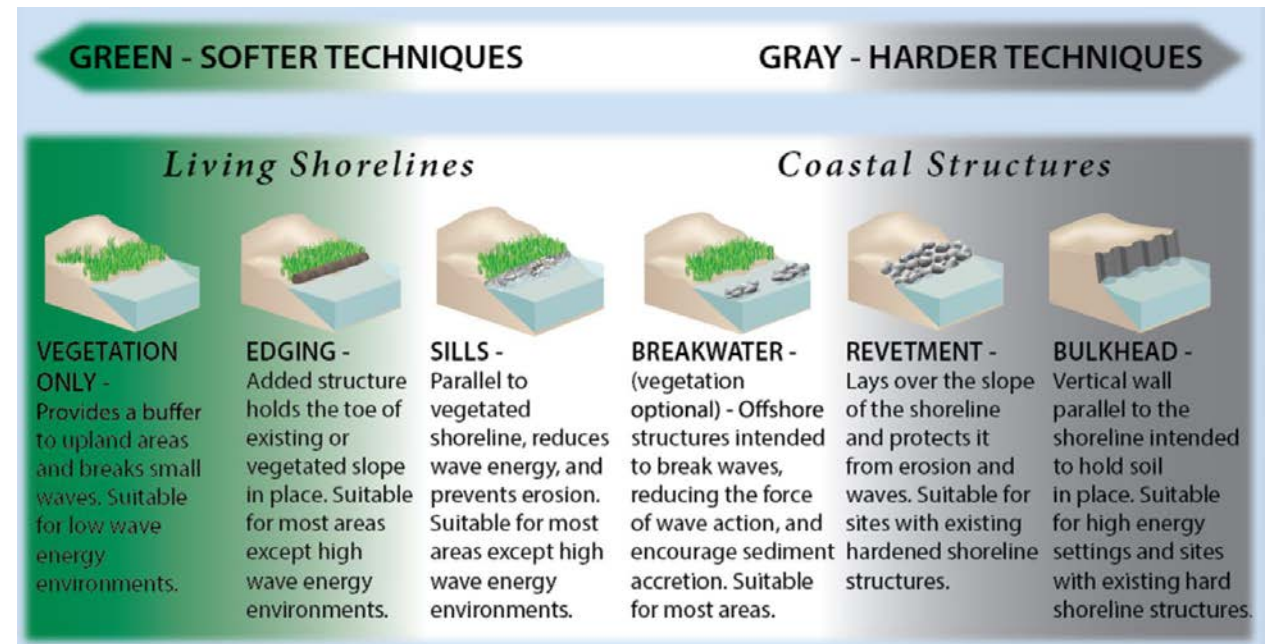


Shoreline Erosion



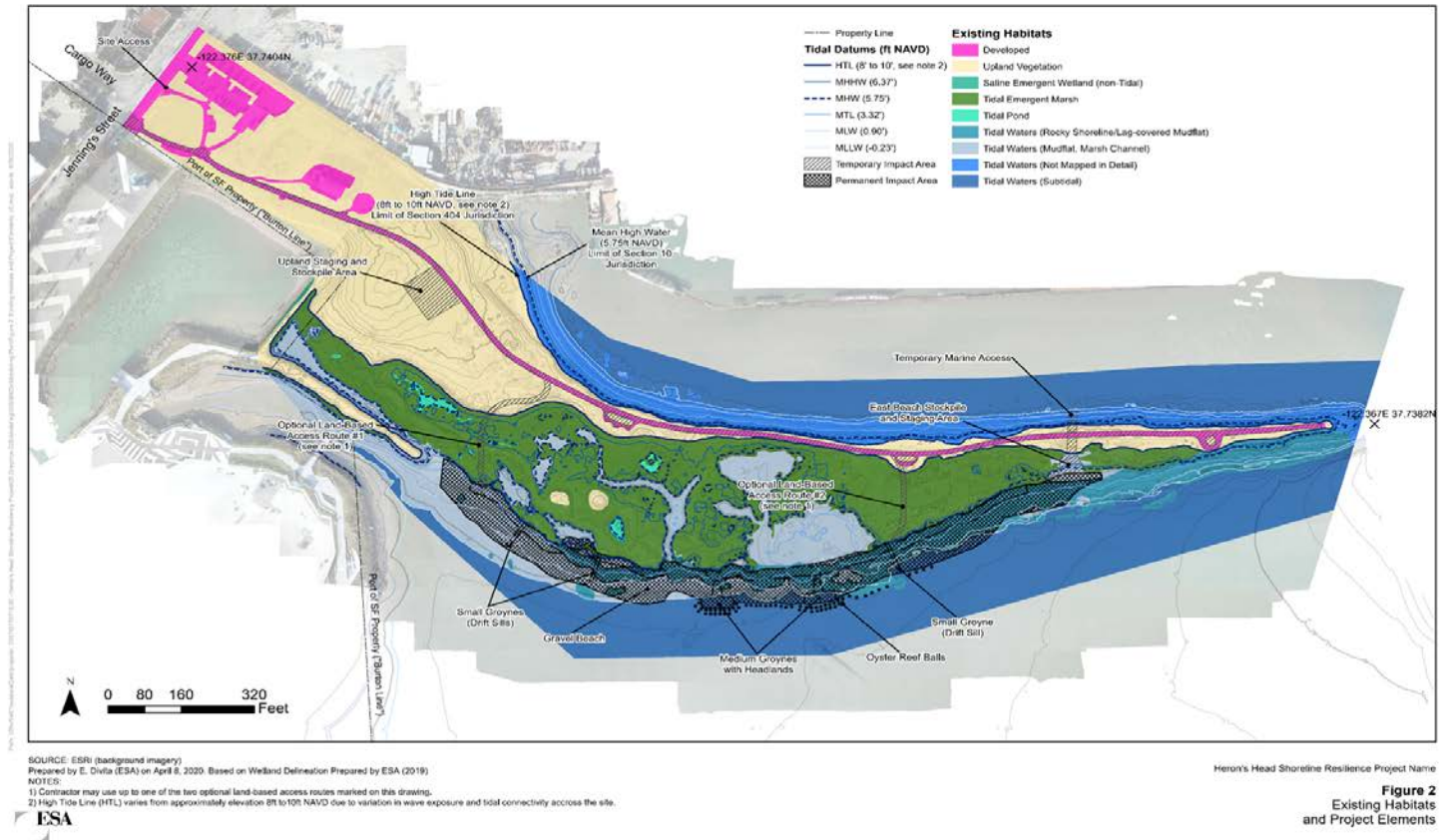
Living Shoreline Approach

- A protected, stabilized coastal edge made of natural materials such as plants, sand, or rock
- Also referred to as nature-based, green, or soft shorelines.
- Provide plant and animal habitat, as well as natural resilience.



Project Objectives

1. Protect the southern shoreline from continued erosion.
2. Restore native wetland plant habitat.
3. Create capacity for adaption to sea level rise.
4. Create youth employment and community engagement opportunities.



Project Elements

- Dynamically stable sand and gravel beach.
- Oyster reef balls.
- Wetland revegetation.
- Youth employment in hands-on habitat restoration and community outreach.
- Post-construction monitoring and habitat stewardship.



Phasing and Funding

| Scope | Schedule | Cost Estimate | Funding Status |
|---|---|-----------------------|--|
| Wetland revegetation, Phase 1: two years | Fall 2020 through Fall 2022. | \$297,000 | SFBRA award of \$297,000, subject to Port Commission and Board of Supervisors approval |
| Shoreline stabilization | August through January of any year, pending funding. | \$2.46 Million | Currently unfunded. Fundraising in progress. |
| Wetland revegetation, Phase 2: three years | After shoreline construction or as stand-alone wetland habitat enhancement. | \$494,000 | Recommend SFBRA award, subject to Port Commission and Board of Supervisors approval. |
| Post-Construction Monitoring: five years | Start at completion of shoreline construction, continue for five years. | \$308,000 | Recommend SFBRA award, subject to Port Commission and Board of Supervisors approval. |
| Total Estimated Project Cost | | \$3.56 Million | |
| Recommended for SFBRA Grant Funding | | \$1.01 Million | |
| Unfunded Cost | | \$2.46 Million | |

San Francisco Bay Restoration Authority Grant

Recommended for SFBRA Grant Funding:

- Wetland Revegetation
- Youth Employment
- Project Monitoring
- Wetland Plant Habitat Stewardship
- First 2 of 5 years

Funding award approved: \$297,000



SAN FRANCISCO BAY
RESTORATION AUTHORITY



Potential Habitat Elevations

| |
|---|
| Estuary (-12.1306572 - -0.589212463) |
| Tidal Flat (-0.589212463 - 3.070787537) |
| Low Marsh (3.070787538 - 5.590787537) |
| Middle Marsh (5.590787538 - 6.210787537) |
| High Marsh (6.210787538 - 7.37) |
| Potential Transition Zone (7.370000001 - 8.2558268) |
| Upland (8.255826801 - 22.46892548) |

▨ Invasive Species Coverage (60,800 sq. ft.)

○ Land Based Site Access

Elevations follow North American Vertical Datum of 1988 (NAVD88), Feet, GEOID 12b.

LEJ Eco-Apprentices cultivate, plant and maintain wetland plants





Saltmarsh grass (*Distichlis spicata*)



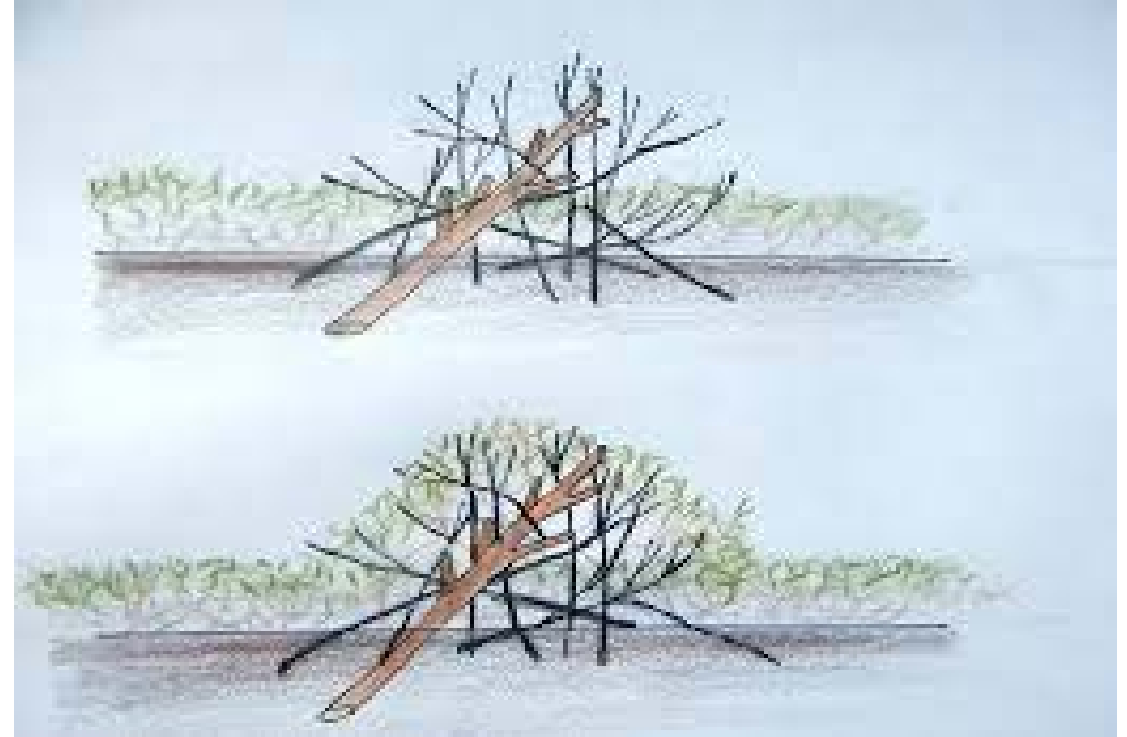
Marsh Gumplant (*Grindelia stricta*)



Alkali heath (*Frankenia salina*)

Key wetland species will be grown and planted

LEJ and S. F. State Scientists will collect, cultivate, and plant the endangered California seablite

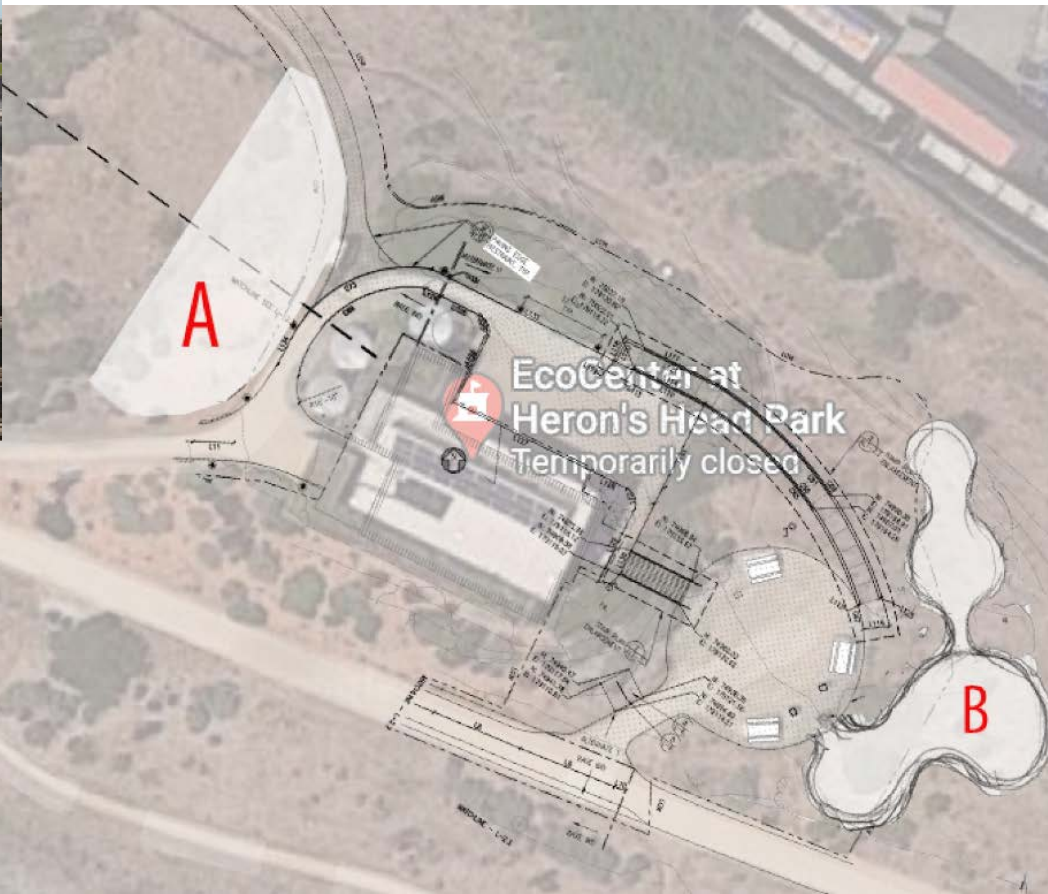


“Arboring” creates habitat for birds and their prey.

Fire on July 4th burned vegetation around the EcoCenter



Restoring burned area offers opportunity



Next Steps

| | |
|---|---|
| Port Commission votes on Authorization to Accept and Expend Grant for \$297,000 from SF Bay Restoration Authority and contract with LEJ | September 8, 2020 |
| Board of Supervisors must authorization Port to Accept and Expend SF Bay Restoration Authority Grant. | September 2020 |
| Advertise HHP Improvements Project Award Contract Start Work? | September 2020 November 2020 January 2021 |
| Phase 1 Wetland Plant Habitat Restoration. | Fall 2020 through Fall 2022. |
| Complete Engineering Design, obtain permits to construct, and seek funding for Living Shoreline construction. | Engineering and permits complete by Jan. 2021. Fundraising on-going. |

